V. OVERLAY DISTRICT

Introduction

Many communities take pride in their natural features and wish to preserve them because of their ecological significance and the benefits they provide. These areas may be small pristine woodlands or an entire ecosystem that encompass several species and habitats. In most cases natural features are irregularly shaped crossing property lines, zoning districts, land use, or municipal boundaries. As a result, these areas are subject to various regulations that may or may not provide some degree of protection against disturbance and/or development.

An overlay zone is an effective method communities can use to provide further protection to natural areas by augmenting single topic ordinances that regulate particular natural features such as wetlands or woodlands. Overlay zones are essentially an additional zoning district placed on top of the underlying zoning district(s). The overlay district does not replace existing regulations; rather, the overlay supplements them with language designed to protect significant ecosystems. (See the Introduction to this booklet for a discussion about ecosystems.) Boundaries of the overlay district usually follow the limits of the ecosystem to be protected and must be shown on a map in the community's zoning documents. The overlay district is enforced through an ordinance. Coordination between communities would be necessary if an ecosystem spans municipal boundaries.

Overlay districts can be particularly effective when they include provisions that:

- 1. Protect trees and other vegetation;
- 2. Enforce setbacks from sensitive natural areas:
- 3. Require open space preservation; and
- 4. Protect identified mating, nesting, and other critical habitat areas.

The boundary of an overlay district could be identified using the data recently compiled for Macomb County by the Michigan Natural Features Inventory (MNFI). This data locates potential conservation areas and gives a good indication of what natural areas should be protected. These areas are ranked and categorized under three (3) priority categories for additional study and preservation. The Macomb County Department of Planning and Economic Development maintain this data.

A 100-year floodplain provides many benefits to a community including flood water storage and habitat for plants animals, and is a good example of where an overlay district could be implemented. A floodplain may encompass many natural features such as wetlands and woodlands, or entire ecosystems, providing additional protection beyond other local ordinances and/or state and federal statutes that may otherwise provide a minimal level of protection to these important ecological systems.

Typically, development within an overlay district can occur, but only if the requirements for the overlay and underlying districts are satisfied. A community should take extra care when crafting an overlay district ordinance to avoid regulations that conflict with existing regulations in the underlying district. When properly implemented, an overlay district ordinance can accomplish three important objectives for a community concerned with protecting natural features:

- 1. An inventory, more detailed than the MNFI database, can be required if development of a site is proposed. Some communities may wish to perform a detailed inventory of the entire district independent of any development proposals. Or an inventory may be done by the developer one parcel at a time as properties come up for development;
- 2. Alerts a developer of a site's potentially significant resources and that it is subject to special restrictions; and
- 3. Allows the community to identify those priority protection areas on a site that a developer must refrain from developing or develop with minimal site disturbance.



Regulatory Considerations

The most common approach taken by communities is perhaps adoption of an overlay district ordinance to protect a specific natural feature or area. This ordinance would be separate from and in addition to other ordinance(s) that protect certain natural features (woodlands, buffers). Floodplains or riverine systems are common natural features protected by overlay districts. Overlay district(s) could also be established within a floodplain ordinance accompanied by a map showing the extent of the floodplain/overlay district.

Overlay districts are not specifically identified as a permitted regulatory technique for communities. However, natural features can be regulated through the Natural Resources and Environmental Protection Act, Act 451 of 1994, as amended (MCL §§ 324.101 et seq.). Under the Act, the State of Michigan and, in some cases, local communities, have the power to regulate land uses in environmentally sensitive areas. Authority to regulate natural features also comes from the City and Village Zoning Act (Act 207 of 1921 as amended), and the Township Zoning Act (Act 184 of 1943 as amended).

Example Ordinance Language

The text included here provides example language of an overlay district ordinance. Like any example, this language should only be used as a guide. Each community has a unique set of natural features and existing ordinances that this regulation needs to compliment. Therefore, ordinance sections are accompanied by general considerations for individualizing the ordinance.

RESOURCE PROTECTION OVERLAY DISTRICT

(COMMUNITY NAME), MICHIGAN Ordinance No. _____

SECTION 1 - GENERAL

Section 1.1 - Intent

The purpose of this ordinance is to ensure that property is developed in a manner consistent with its zoning designation, and the proposed physical elements are designed and arranged to protect the priority resource protection areas both on the site, and in the vicinity of the site, as identified by the (Community Name) on (map(s) as shown in the (Community Name) Master Plan. The Resource Protection Overlay District establishes procedures to enable the applicant and the (Community Name) to achieve the mutually compatible objectives of reasonable use of land and protection of vital natural resources.

SIDEBAR TEXT

- Maps that show areas intended for resource protection should be a component of this ordinance. Data obtained from the Michigan Natural Features Inventory (MNFI) can be helpful for the creation of these maps.
- Data from Michigan land conservancies such as the Macomb Land Conservancy, Southeast Michigan Land Conservancy, and the Nature Conservancy, may also be helpful when creating the maps.

SECTION 2 – APPLICABILITY

Section 2.1 - Minimizing Disturbance

To the maximum extent feasible, any development plan (i.e. site plan, subdivision plat and site condominium plan) shall be designed and arranged to ensure that disturbance to any portion of a priority resource protection area as a result of the development, and that impacts and disturbance to such areas and the plants and wildlife inhabiting those areas, shall be minimized through the use of creative land development techniques, natural area buffers, and conservation easements.

SIDEBAR TEXT

- The underlying zoning within an overlay district may or may not allow development patterns that help to protect natural features, such as cluster developments or PUDs. A community may want to consider adding language to the overlay district ordinance stating that it encourages and would consider these development patterns within the overlay district.
- Cluster developments and PUD's can increase density in a particular area of a site but decrease overall imperviousness of a site, protect watersheds, conserve natural areas, and provide green space.

SECTION 3 - ECOLOGICAL CHARACTERIZATION

Section 3.1 - Resource Inventory

It is intended that these Ordinance requirements be applied based upon reliable and factual data and be included on the appropriate map(s).

If a development site is determined by the (Community Name), based on additional information or from inspection, that the site likely includes areas with wildlife, plant life and/or other natural characteristics in need of protection, and if the (Community Name) does not then possess the information required to apply review standards, then the developer shall provide to the (Community Name) a report prepared by a professional qualified in the areas of ecology, botany, wildlife biology or other relevant discipline that describes, without limitation, the following:

A. The wildlife use and habitat showing the species of wildlife using the area, the times or seasons that the area is used by those species and the "value" (meaning feeding, watering, cover, nesting, roosting, perching) that the area provides for such wildlife species;

- **B.** The boundary of wetlands in the area and a description of the ecological functions and characteristics provided by those wetlands;
- **C.** Any prominent views from or across the site;
- **D.** The pattern, species and location of any significant native trees and other native site vegetation;
- **E.** The bank, shoreline and high water mark of any stream or body of water on the site:
- **F.** Wildlife movement corridors; and
- **G.** The general ecological functions provided by the site and its features.

The (Community Name) may employ their own consultants with the relevant expertise to review materials submitted by the applicant. The applicant shall be required to provide and present the credentials for all qualified professionals. The credentials and qualifications of these individuals shall be sufficient, in the opinion of the (Community Name), to demonstrate competence in the area in which the expertise will be provided.

SECTION 4 - ESTABLISHMENT OF PRIORITY PROTECTION

Section 4.1 – Areas of Priority Protection

For every development subject to this Ordinance, the applicant shall propose areas of priority protection. The (Community Name) shall review these areas for appropriateness. If acceptable, the (Community Name) shall accept and establish on the project development plan, areas of priority protection. The development plan shall establish the development capability of the site and indicate the specific area(s) of a site within which the developed project may be constructed and within which the development activity shall be contained. In establishing the development capability of a site, the (Community Name) shall consider and apply the following criteria:

- A. The actual boundary of development capability designation to be shown on a development plan shall be proposed by the applicant, and established by the (Community Name) through site evaluations and reconnaissance, and shall be based on the ecological characterization of the area.
- **B.** In establishing the development capability of the site, the following shall be taken into account, as evaluated by qualified professional(s) and/or certified consultant(s):

- 1. Visual impacts, including but not limited to ridgeline protection areas and protection of scenic views;
- 2. Erosion prevention and control, including but not limited to protection of natural drainage channels and compliance with an approved stormwater drainage management plan;
- **3.** Preservation of significant native trees and other native site vegetation, including protection of natural area buffers zones;
- 4. Conservation of water, including but not limited to preservation of existing native vegetation, reduction in amounts of irrigated areas and similar considerations;
- 5. Stream corridor and wetland protection and buffering;
- 6. Site topography, including but not limited to such characteristics as steepness of slopes, existing drainage features, rock outcroppings, river and stream terraces, valley walls, ridgelines and scenic topographic features;
- **7.** Floodplains and floodways;
- **8.** Wildlife movement corridors;
- **9.** Natural area buffer zones;
- 10. The practical needs of approved construction activity in terms of ingress and egress to the developed project and necessary staging and operational areas; and
- 11. Hydrology and groundwater flow.

SECTION 5 - DEVELOPMENT STANDARDS AND GUIDELINES

Section 5.1 - Permitted Activities

To the maximum extent feasible, no construction activity, including, without limitation, grading, excavation or stockpiling of fill material, shall be permitted within priority protection areas whether to provide for a building site, on-site utilities or services, or for any roads or driveways except as provided for below.

- **A.** Mitigation of development activities;
- **B.** Restoration of previously disturbed or degraded areas to their natural state;
- C. Emergency public safety activities and utility installations, installed with the utmost sensitivity to natural features, when such activities and installations cannot reasonably be contained to areas outside of those identified as significant;
- **D.** Construction of trails or pedestrian walkways that will provide access in an environmentally appropriate manner; and
- **E.** The enhancement of the habitat values and/or other natural resource values of a natural area

Section 5.2 - Establishment of Buffer-Zones

Buffer zones shall be established adjacent to areas of priority protection. The (Community Name) may reduce the perimeter setback and buffer zones in cases where the density of the proposed use is compatible with adjacent uses and/or natural features, such as woodlands and topographical features. In establishing the buffer zone(s), the (Community Name) shall consider and apply the following criteria:

- **A.** The foreseeable impacts of development on the wildlife usage or ecological character or function of the natural area;
- **B.** The ecological and wildlife use characterization of the natural area;
- **C.** The existence of wildlife movement corridors:
- **D.** The extent of floodplains and floodways;
- **E.** The type, amount and extent of existing vegetation on the site;
- **F.** The existence of special wildlife habitat features;
- **G.** The character of the proposed development in terms of use, density, traffic generation, quality of runoff water, noise, lighting and similar potential development impacts; and
- **H.** Site topography, including but not limited to such characteristics as steepness of slopes, existing drainage features, ridgelines and scenic topographic features.

SIDEBAR TEXT

- Vegetated areas known as buffers have long been recognized as important for maintaining water quality, but they also provide many other benefits.
- Buffer zones perform a number of significant functions including reducing water temperature; filter sediments and other contaminants; reduce nutrient loads to lakes; stabilize stream banks with vegetation; provide riparian wildlife habitat; maintain and protect fish habitats; form aquatic food webs; and provide a visually appealing greenbelt and recreational opportunities.
- See Chapter 6, *Natural Feature Setback/Buffer*, for a detailed discussion on natural feature setbacks and buffers.

Section 5.3 - Mitigation of Disturbance

While development is anticipated outside of priority protection areas, the applicant shall avoid disturbance to priority protection areas and undertake mitigation measures to restore any damaged or lost natural resource. Any such mitigation or restoration shall be roughly equivalent to the loss suffered by the community because of the disturbance, and shall be based on such mitigation and restoration plans and reports as have been requested, reviewed and approved by the (Community Name). The mitigation plan shall include a timeline for restoration and mitigation of disturbed areas, which must be acceptable to the (Community Name). The (Community Name) may require performance guarantees pursuant insuring fulfillment of, and compliance with, the mitigation plan. In addition, the (Community Name) may issue a cease and desist order of the site development activities if determined to be in violation of the approved mitigation plan.

Section 5.4 – Connections

If the development site contains priority protection areas that connect to other off-site areas of a similar nature, to the maximum extent feasible, the development plan shall preserve such connections. If priority protection areas lie adjacent to the development site, but such areas are not presently connected across the development site, then the development plan shall, to the extent reasonably feasible, provide such connection. Such connections shall be designed and constructed to allow for the continuance of existing wildlife movement between natural areas and to enhance the opportunity for the establishment of new connections between areas for the movement of wildlife.

Section 5.5 - Lakes, Reservoirs and Ponds

If the development site contains a lake, reservoir or pond, the development plan shall include such enhancements and restoration as are necessary to provide reasonable wildlife habitat and improve aesthetic quality in areas of shoreline transition and areas subject to wave erosion. The development plan shall also include a design that requires uniform and ecologically and aesthetically compatible treatment among the lots or tracts surrounding a lake, reservoir or pond with regard to the establishment of erosion control protection and shoreline landscaping on or adjacent to such lots or tracts.

Section 5.6 - Design and Aesthetics

Projects located within a Resource Protection Overlay District, shall be designed to complement the visual context of the natural area. Techniques such as architectural design, site design, the use of native landscaping and choice of colors and building materials shall be utilized in such manner that scenic views across or through the site are protected, and manmade facilities are screened from off-site observers and blend with the natural visual character of the area.

SIDEBAR TEXT

• "Natural materials" such as wood and stone are considered appropriate architectural materials that could be used in an overlay district. Neutral colors are also recommended.

Section 5.7 – Storm Water Drainage/Erosion Control

All storm water drainage and erosion control plans shall meet the soil erosion and sedimentation control standards adopted by the Macomb County Department of Public Works for design and construction and shall, to the maximum extent feasible, utilize nonstructural control techniques, including but not limited to:

- **A.** Limitation of land disturbance and grading;
- **B.** Maintenance of vegetated buffers and natural vegetation;
- **C.** Minimization of impervious surfaces;
- **D.** Use of terraces, contoured landscapes, runoff spreaders, grass or rocklined swales;
- **E.** Use of infiltration devices; and
- **F.** Prohibit the discharge of stormwater into undeveloped areas.

Additional Resources

1) Southeast Michigan Resource Conservation & Development Council, www.semircd.org/index.php.